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## Poster Presentation

### Efficacy of Crocin as Anti-Inflammatory Agent in Multiple Sclerosis Patients

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#### Abstract

Inflammations form an integral part of the innate immunity against pathogenic infections. NF- $\kappa$ B represents a family of inducible transcription factors, which regulates a large array of genes involved in different processes of the immune and inflammatory responses. It is now clear that NF- $\kappa$ B signaling pathway is involved in the regulation of inflammation, contributing to the initiation and development of inflammatory diseases. One of inflammatory disease is multiple sclerosis, which is the CNS generally considered to be an autoimmune disease involving the pathogenic action of CNS-specific CD4<sup>+</sup> T cells, particularly Th1 and Th17 cells. Normally, inflammation is beneficial to the host and can be resolved in a timely manner. Saffron in filaments is the dried, dark red stigmata of *Crocus sativus* L. flowers and it is used as a spice, food colorant, and a drug in medicine. Crocin is the chemical primarily responsible for the color of saffron. In addition to reduce the TNFR1 protein expression, decrease of p-I $\kappa$ B protein levels and thus confirming an early inactivation of NF- $\kappa$ B so it's useful as anti-inflammatory drugs.

**Keywords:** Crocin, Multiple Sclerosis, NF- $\kappa$ B, TNFR1

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